

Serial No.: 10/501,157

Agent Docket No.: AP020-04

AMENDMENTS TO THE CLAIMS:

(1) Please withdraw claim 17 without prejudice or disclaimer of the subject matter thereof.

Claim 1 (Canceled).

Claim 2 (Previously presented): An air cushion manufacturing system for making an air cushion packaging from tubular film, comprising:

a frame having a plate, a first beam, and a second beam, said plate defining a recess in said plate, said first and second beam being articulated mounted to said frame and orientated so that said tubular film passes therebetween;

an elongated element attachable to said first beam and adapted to be received through said recess in said plate thereby creating tension on said tubular film;

a body positioned adjacent said elongated element and between said first and second beams, said body adapted to be inserted into the interior of said tubular film;

an inflating device having at least one hollow needle connected to an inflating means, said inflating device being attachable to said first beam past said two bars of said body;

a welding device attachable to said second beam;

a first actuator attachable to said first beam for providing an oscillating movement to said first beam;

a second actuator attachable to said second beam for providing an oscillating movement to said second beam; and

a film traction device in contact with said tubular film.

Claim 3 (Previously presented): The air cushion manufacturing system as set forth in claim 2, wherein said body rests on two bars disposed outside said tubular film, said bars being separated by a distance less than the external diameter of the body.

Serial No.: 10/501,157

Agent Docket No.: AP020-04

Claim 4 (Previously presented): The air cushion manufacturing system as set forth in claim 2, wherein said inflating means is a fluid compressor.

Claim 5 (Previously presented): The air cushion manufacturing system as set forth in claim 2, wherein said welding device having at least one heating bar disposed one above the other.

Claim 6 (Previously presented): The air cushion manufacturing system as set forth in claim 5 further comprising at least two thrust bars disposed one above the other and positioned opposite said heating bars of said welding device with said tubular film passing therebetween, said thrust bars being oriented so as to allow said hollow needle of said inflating device to pass therebetween.

Claim 7 (Previously presented): The air cushion manufacturing system as set forth in claim 2 further comprising a serrated knife attachable to said second beam adjacent said welding device.

Claim 8 (Previously presented): The air cushion manufacturing system as set forth in claim 5 further comprising a serrated knife attachable to said second beam and located between said heating bars of said welding device.

Claim 9 (Previously presented): The air cushion manufacturing system as set forth in claim 2, wherein said film traction device having at least two cylinders, and a motor and gear assembly for providing rotational motion to said cylinders.

Claim 10 (Previously presented): The air cushion manufacturing system as set forth in claim 9, wherein said cylinders are coated with a flexible and elastic material.

Claim 11 (Previously presented): The air cushion manufacturing system as set forth in claim 10, wherein said flexible and elastic material is foam rubber.

Claim 12 (Previously presented): An air cushion manufacturing system for making an air cushion packaging from tubular film, comprising:

a frame having a plate, a first beam, and a second beam, said plate defining a recess in said plate, said first and second beam being

Serial No.: 10/501,157

Agent Docket No.: AP020-04

articulated mounted to said frame and orientated so that said tubular film passes therebetween;

an elongated element attachable to said first beam and adapted to be received through said recess in said plate thereby creating tension on said tubular film;

a body positioned adjacent said elongated element and between said first and second beams, said body adapted to be inserted into the interior of said tubular film, said body rests on two bars disposed outside said tubular film, said bars being separated by a distance less than the external diameter of the body;

an inflating device having at least one hollow needle connected to an inflating means, said inflating device being attachable to said first beam past said two bars of said body;

a welding device attachable to said second beam past said two bars of said body, said welding device having at least two heating bars disposed one above the other;

a first actuator attachable to said first beam for providing an oscillating movement to said first beam;

a second actuator attachable to said second beam for providing an oscillating movement to said second beam;

at least one thrust bar disposed one above the other and positioned opposite said heating bars of said welding device with said tubular film passing therebetween, said thrust bars being oriented so as to allow said hollow needle of said inflating device to pass therebetween;

a serrated knife located between said heating bars of said welding device;

and

a film traction device having at least two cylinders and a motor and gear assembly for providing rotational motion to said cylinders.

Serial No.: 10/501,157

Agent Docket No.: AP020-04

Claim 13 (Previously presented): The air cushion manufacturing system as set forth in claim 12, wherein said inflating means is a compressor.

Claim 14 (Previously presented): The air cushion manufacturing system as set forth in claim 12, wherein said cylinders of said traction device having ends of greater diameter than that of their central part thereby said cylinders being in contact with each other at their extremities and defining a space in their central part for the two walls of said tubular film to remain separated after inflation.

Claim 15 (Previously presented): The air cushion manufacturing system as set forth in claim 14, wherein said cylinders are coated with a flexible and elastic material.

Claim 16 (Previously presented): The air cushion manufacturing system as set forth in claim 15, wherein said flexible and elastic material is foam rubber.

Claim 17 (Withdrawn - currently amended): A method of making an air cushion for packaging from a tubular film having two walls, said method comprising the steps of:

a step of providing an apparatus, said apparatus comprising a frame having a plate, a first beam, and a second beam, said plate defining a recess in said plate, said first and second beam being articulated mounted to said frame and orientated so that said tubular film passes therebetween; an elongated element attachable to said first beam and adapted to be received through said recess in said plate thereby creating tension on said tubular film; a body positioned adjacent said elongated element and between said first and second beams, said body adapted to be inserted into the interior of said tubular film; an inflating device having at least one hollow needle connected to an inflating means, said inflating device being attachable to said first beam past said two bars of said body; a welding device attachable to said second beam; a first actuator attachable to said first beam for providing an oscillating movement to

Serial No.: 10/501,157

Agent Docket No.: AP020-04

said first beam; a second actuator attachable to said second beam for providing an oscillating movement to said second beam; and a film traction device in contact with said tubular film;

introducing [[a]] said body through an opening located in an end of said film and into the interior of said film;

drawing said film between two bars located on said body, then through a driving means;

welding said end of said film;

oscillating [[a]] said first beam by way of [[a]] said first actuator so as to displace [[an]] said elongated element to enter [[a]] said recess defined in [[a]] said plate located opposite said first beam;

introducing said two walls of said film into said recess of said plate by way of a strip attached to said elongated element thereby creating tension on said film;

retaining said film on a roller and [[a]] said traction device for creating more tension and thereby improving the separation of said two walls of said film;

introducing [[a]] said hollow needle into said film by the oscillating movement of said first beam, said needle penetrating only [[on]] one wall of said two walls of said film;

inflating said film, whereby fluid being retained by said welded ends of said film;

withdrawing said hollow needle rearward by a reverse movement of said first beam;

sealing said two wall of said film by way of [[a]] said welding device located on [[a]] said second beam opposite said first beam, said welding occurs by oscillating said second beam by way of [[a]] said second actuator so as to displace at least two welding bars located on said welding device so as to come to rest on at least two thrust bars

Serial No.: 10/501,157

Agent Docket No.: AP020-04

located on said first beam thereby pinching said tubular film therebetween;
welding said two walls of said tubular film by heating said welding bars to seal said two walls of said film to form a cushion;
withdrawing said welding bars of said welding device by a reverse movement of said second beam; and
pulling said cushion by way of said traction device for a distance equal to the length of said cushion.